

## **REMARKS**

Claims 1-22, 24, 27-51, and 77-79 were pending and presented for examination in this application. In an Office Action dated June 29, 2007, claims 1-22, 24, 27-51, and 77-79 were rejected. Applicants thank Examiner for examination of the claims pending in this application and addresses Examiner's comments below.

Applicants are canceling claims 77-79. Applicants are amending independent claims 1, 6, 7, and 24 in this Amendment and Response.

In view of the Amendments herein and the Remarks that follow, Applicants respectfully request that Examiner reconsider all outstanding objections and rejections, and withdraw them.

### **Response to Rejection Under 35 USC §103(a)**

Claims 1, 2 and 4-6 under 35 USC §103(a) as allegedly being unpatentable in view of U.S. Patent No. 5,457,478 ("Frank") in view of U.S. Patent 5,854,624 ("Junod") and U.S. Patent 5,798,748 ("Hilton"). Applicants respectfully traverse this rejection as applied to the amended claims.

The independent claims recite a wireless optical input device that allows a user to interact with a computer. In addition, the independent claims recite an image data processing logic coupled to a photo-sensitive element and configured to receive image data, detect activity based on the image data, and to qualify whether the detected activity is false activity based on statistical analysis of past activity, thereby enabling decreased power consumption in a computer input device configured to receive power from a self-contained power source. For example, amended independent claim 1 recites, *inter alia*, the following:

an image data processing logic coupled to the photo-sensitive element for receiving the image data and configured to detect activity based on the image data and to qualify detected activity as false activity **based on statistical analysis of past activity** (emphasis added).

Independent claims 6, 7, and 24 recite similar limitations.

Independent claims 1, 6, 7, and 24 of the claimed invention, therefore, recite limitations where activity is detected and qualified as “false activity based on statistical analysis of past activity.”

In contrast, Frank discloses an optical sensing assembly for a computer input device configured to receive power from a power source, the optical assembly comprised of a photo-sensitive element configured to receive reflected light from a light source to produce a first image data associated with a first image, a second image data associated with a second image, and an image data processing logic. Among other things Frank does not teach or suggest qualification of “detected activity as false activity based on statistical analysis of past activity” as claimed in independent claims 1, 6, 7, and 24. Frank, therefore, does not contain all the limitations of independent claims 1 and 6.

The Junod reference does not remedy the deficiency of Frank. Junod discloses a battery-powered wireless mouse that after a period of nonuse or lack of activity enters a standby mode, and then returns to normal mode if any activity occurs. Thus, like Frank, Junod does not teach or suggest qualification of “detected activity as false activity based on statistical analysis of past activity” as claimed in independent claims 1, 6, 7, and 24. Accordingly, the combination of Frank and Junod fails to teach all the elements of

independent claims 1, 6, 7, and 24, and so cannot render these independent claims obvious nor the claims that depend therefrom.

The Hilton reference does not remedy the deficiencies of Franks and Junod. Hilton discloses using optical sensors in a mouse and the idea of zeroing any movement data less than a minimum sensed value in order to prevent unwanted drifting from occurring due to hysteresis inherent in the mouse. Thus, like a combination of Frank and Junod, a combination of Frank, Junod, and Hilton does not teach or suggest qualification of “detected activity as false activity based on statistical analysis of past activity” as claimed in independent claims 1, 6, 7, and 24. Accordingly, the combination of Frank, Junod, and Hilton fails to teach all the elements of independent claims 1 and 6, and so cannot render these independent claims obvious nor the claims that depend therefrom. Applicants, therefore, respectfully submit that this ground for rejection is unjustified and request reconsideration and allowance of claims 1, 2 and 4-6.

Claim 3 stands rejected as allegedly being unpatentable over Frank and Junod as applied to claims 1 and 2 and further in view of U.S. Patent No. 6,803,954 (“Hong”). Applicant traverses this ground of rejection. Frank and Junod do not teach all the elements of claim 3 for at least the reasons stated above.

Hong discloses predicting a moving vector of a compressed image using a CCD coupled with a processor to process image data for a moving vector to improve image quality. Thus, Hong does not remedy the deficiencies of Frank and Junod since Hong also does not teach or suggest qualification of “detected activity as false activity based on statistical analysis of past activity” as claimed in independent claims 1, 6, 7, and 24. Accordingly, the combination of Frank, Junod, and Hong does not teach all of the elements

of claim 3, and so cannot render this claim obvious. Applicants, therefore, respectfully submit that this ground for rejection is unjustified and request reconsideration and allowance of claim 3.

Claims 7, 8, 10, 14-15, 17, 19-22, 24, 27, 29, 35, 38, 43-45, and 51 stand rejected as allegedly being unpatentable over Junod in view of Hilton. Applicant traverses this ground of rejection. Junod and Hilton do not teach all the elements of claims 7, 8, 10, 14-15, 17, 19-22, 24, 27, 29, 35, 38, 43-45, and 51 for at least the reasons stated above. Applicants, therefore, respectfully submit that this ground for rejection is unjustified and request reconsideration and allowance of claims 7, 8, 10, 14-15, 17, 19-22, 24, 27, 29, 35, 38, 43-45, and 51.

Claims 9, 11-13, 16, 18, 28, 30-34, 36-37, 39-42, and 46-50 stand rejected as allegedly being unpatentable over Junod and Hilton as applied to claims 7 and 24, and further in view of Frank. Applicant traverses this ground of rejection. Frank, Junod, and Hilton do not teach all the elements of independent claims 7 and 24 for at least the reasons stated above, and so cannot render these claims obvious nor the claims that depend therefrom. Applicants, therefore, respectfully submit that this ground for rejection is unjustified and request reconsideration and allowance of claims 9, 11-13, 16, 18, 28, 30-34, 36-37, 39-42, and 46-50.

### **Response to Rejection of Double Patenting**

Claims 1-6 and 77-79 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent 6,781,570 (“Arrigo”). Applicant traverses this ground of rejection. Independent claims 1 and 6 of the present invention recite qualification of “detected activity as false activity based on statistical

analysis of past activity” as claimed in independent claims. Claims 1-17 of Arrigo do not recite qualification of “detected activity as false activity based on statistical analysis of past activity” as claimed in independent claims 1 and 6. Independent claims 1 and 6 as well as the claims that depend therefrom are, therefore, patentably distinct from claims 1-17 of Arrigo. Applicants, therefore, respectfully submit that this ground for rejection is unjustified and request reconsideration and allowance of claims 1-6 and cancellation of claims 77-79.

### **Conclusion**

In sum, Applicants respectfully submit that claims 1-22, 24, 27-51, as presented herein, are patentably distinguishable over the cited references (including references cited, but not applied). Therefore, Applicants request reconsideration of the basis for the rejections to these claims and request allowance of them.

In addition, Applicants respectfully invite Examiner to contact Applicants’ representative at the number provided below if Examiner believes it will help expedite furtherance of this application.

Respectfully Submitted,  
Simone Arrigo et al.

Date: October 29, 2007

By: /Rajiv P. Patel/

Rajiv P. Patel, Reg. No. 39,327  
FENWICK & WEST LLP  
801 California Street  
Mountain View, CA 94041  
Phone: (650) 335-7607  
Fax: (650) 938-5200